

V. REMARKS

The Office Action indicates that the Declaration is defective. A Substitute Declaration is filed herewith to cure the defect.

Claims 1-11 are objected to because of informalities. The claims are amended to obviate the objection. Withdrawal of the objection is respectfully requested.

The drawing figures are objected to under 37 CFR 1.83 (a) allegedly because the drawings fail to show every feature of the invention specified in the claims, namely the shutter moving back and forth per claim 8, the cradle per claim 9 and the limitation of claim 10. It is respectfully submitted that the features of claim 8 are illustrated in Figs. 5 and 6. Specifically, Fig. 5 shows the connector (10) in which the shutter (31) moves forward to cover the contacts (2) and Fig. 6 shows the connector (10) in which the shutter (31) moves back to expose the contacts (2). The term "cradle" has been canceled from claims 9 and 10. As a result of the above, there is no need to add new sheets of drawing figures or provide replacement sheets of drawing figures. Withdrawal of the objection is respectfully requested.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as unpatentable over Yu et al. (2004/0132325) in view of Rundle (3,673,545). The rejection is respectfully traversed.

(1) Erroneous recognition of cited inventions.

It is respectfully submitted that the United States Patent and Trademark Office has erroneously recognized the differences between the present invention and the cited inventions at least on the following points:

First, the plug housing of the connector of this invention has the frame part and the header part. The header part is integrally molded with the frame part and protrudes from the frame part. Whereas the plug housing of the connector of the cited reference 1 (Yu et al.; 2004/0132325) is provided only with a frame part but with no header part. However, with regard to this point, if the Examiner insists that the connector of the cited reference 1 comprises both of a frame part and a header part, it is respectfully requested that the Examiner particularly

specify which parts of the connector he recognizes as corresponding to the frame part and the header part.

Secondly, the connector of the cited reference 1 has no mounting board protruding from the frame part, and the pins (32) corresponding to the contacts of the present invention are arranged in a single line to be molded with the plug housing as shown in Fig. 1. Whereas the header part of the present invention has the mounting board (12), and contacts are arranged in parallel on the both surfaces of the mounting board.

Further, although the United States Patent and Trademark Office has recognized the ring (12) in the cited reference 1 as a shutter corresponding to that of the present invention, the shutter (ring) of the cited reference 1 is to cover the frame part from outside but is not to be enclosed within the frame part as in this invention.

However, with regard to these points, if the Examiner denies Applicant's assertion, it is respectfully submitted that the Examiner specifically indicate which elements of the connector of the cited reference 1 correspond to the mounting board and such of the present invention.

(2) Erroneous judgment on non-obviousness

The cited reference 2 (Rundle; 3,673,545) has disclosed a connector comprising a rigid block (42) (corresponding to the frame part according to the present invention) and a floating block (44) (corresponding to the header part of this invention) mounted on this rigid block. Although, in the cited reference 2, the floating board (44) is provided with a mounting board, and, on the both surfaces of the mounting board, the contacts are arranged dual in line but not provided with a movable shutter to cover these contacts.

As described above, since the contact arrangement structure of the cited reference 1 is different from that of the cited reference 2, to begin with, Applicant asserts that it is non-obvious to think of combining the cited references 1 and 2. Further, first of all, the contacts of the cited reference 1 do not protrude from the frame part to be exposed such that no purpose itself exists to cover and protect the contacts against dust, and the element corresponding to the shutter is merely

an electrostatic discharge member but not a dustproof shutter. Two pages of drawings comparing Rundle with the present invention is filed herewith illustrating side-by-side comparisons of the respective inventions for the Examiner's review.

Thus, the cited reference 1 neither discloses nor suggests the technique to provide a dustproof shutter to cover only the header part, and the cited reference 2 neither discloses nor suggests the provision itself of a dustproof shutter. Accordingly, from these points, it is respectfully submitted that the Examiner's position that the present invention is obvious by thinking of combining the cited references 1 and 2 is not appropriate.

Furthermore, since the header part of the cited reference 2 sways in the lateral direction, it is respectfully submitted that it unlikely that a shutter will be provided to cover the header part and to be enclosed within the frame part.

On the other hand, the present invention is characteristic in that the contacts are arranged on the both surfaces of the mounting board of the header part protruding from the frame part, and (2) the movable shutter covering the contacts is disposed inside the frame part. Therefore, this invention is effective in enabling the arrangement of many contacts in a space-saving manner by the constitution (1), and in protecting the contacts against dust without making the connector larger by the constitution (2).

As described above, it is respectfully submitted that the Examiner's opinion that the present invention is a combination of the cited references 1 and 2 is respectfully traversed, and that this invention has advantageous effects compared to the inventions of the cited references so as to be non-obviousness to one of ordinary skill in the art.

In view of the above, withdrawal of the rejection is respectfully requested.

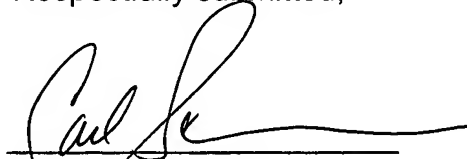
In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

Date: July 28, 2005

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Enclosure(s): Amendment Transmittal
 Substitute Declaration
 2 drawing figures comparing Rundle and present invention

DC202451.DOC

United States Patent

Rundle

[15] 3,673,545

[45] June 27, 1972

[54] MINIATURE CONNECTOR CONSTRUCTION—ADJUSTABLE OR FLOATING

[72] Inventor: David F. Rundle, Camp Hill, Pa.
[73] Assignee: The Bunker-Ramo Corporation, Oak
Brook, Ill.
[22] Filed: Nov. 10, 1969
[21] Appl. No.: 875,060

[52] U.S. Cl. 339/64 M, 339/176 M, 339/217 S
[51] Int. Cl. H01r 21/28
[58] Field of Search 339/1, 6, 7, 9, 64, 176, 217 S,
339/156, 157, 65, 5, 48, 49

[56] References Cited

UNITED STATES PATENTS

263,829 9/1882 Weston 339/6 X

3,400,360 9/1968 Schmitt 339/64
2,680,234 6/1954 Kissick 339/49 B

FOREIGN PATENTS OR APPLICATIONS

1,196,269 7/1965 Germany 339/64

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Assistant Examiner—Lawrence J. Staab
Attorney—Frederick M. Arbuckle

[57]

ABSTRACT

Miniature connector plug of the kind utilized in a package or assembly incorporating a large number of connectors, for use with a socket assembly incorporating the like number of sockets, all of the plugs and all of the sockets being arranged in planes, each plug having portions shiftable transversely for accommodating misalignment between the respective plugs and sockets in a progression of such large numbers of the connectors.

12 Claims, 10 Drawing Figures

